Minutes Of The Meeting Of The Treasury Borrowing Advisory Committee Of The Bond Market Association May 4, 2004

The Committee convened in closed session at the Hay-Adams Hotel at 9:35 a.m. The following members of the Committee were not present: Richard Axilrod, James Capra, Thomas Kalaris, Joseph Rosenberg, and Thomas Marsico. Deputy Assistant Secretary for Federal Finance Timothy Bitsberger welcomed the Committee and gave them the charge.

The Committee first addressed the question in the Committee charge (attached) dealing with the introduction of 5- and 20-year TIPS securities and the impact on portfolio composition, specifically the impact on 10-year nominal issuance. Before the Committee discussed the issue, Mr. Bitsberger presented a series of eight charts (attached) showing Treasury's current and projected debt distribution. The charts indicated that net market borrowing needs are currently lower than earlier projected, that the current issuance calendar is capable of handling projected deficits, that introducing TIPS will require some reduction of nominal issuance but that auction sizes will remain relatively reasonable, and that the resulting distributions in outstanding debt, both current and projected, remain within historical norms.

A discussion ensued between several members about the role of 10-year nominal debt in the Treasury market. One member opined that given the deficit numbers and the reasons Treasury previously stated for moving to reopened 10-year notes in May 2003, that it made sense now to reduce nominal 10-year issuance, but that it was difficult to characterize the impact on liquidity of eliminating the reopened 10-year note. One member stated that 10-year notes were an important risk transference vehicle and suggested that paring back 10-year note sizes would reduce the ability to transfer risk and raise the possibility of squeezes. Other members stated that issuing expensive longer-term debt just for liquidity reasons was not sufficient justification for keeping the 10-year note at current sizes; that Treasury's primary goal is and should be lowest cost of financing over time. Others, concerned about liquidity and citing the current and projected debt distribution charts, suggested that Treasury scale back nominal 10-years slightly and nominal 5-year notes more, to accommodate the new TIPS.

The discussion turned to Treasury's rollover risk. Some members noted that more than half of Treasury's debt matures within 2 years and that 63 percent matures within 3 years. This led some Committee members to suggest that while Treasury may view substituting 5- and 20-year TIPS for 10-year nominal issuance as a symmetric substitution, such a substitution actually changes the risk characteristics of Treasury's portfolio. Specifically, TIPS have a floating-rate component (the inflation component) that effectively makes them behave like a much shorter instrument. Members argued that because of the floating-rate component issuing more TIPS while cutting back long-term nominal issuance would effectively result in even more debt rolling over sooner. Committee

members questioned the wisdom of this move to effectively shorten average maturity of the portfolio by substitution of TIPS issuance for long-term nominal issuance at what may be perceived as the end of a 20-year deflationary trend. Treasury officials pointed out that historical 40-year interest cost modeling, using short-dated and long-dated financing assumptions, indicate that shorter-dated issuance saves interest costs over time. Additionally, theoretical arguments concerning term-risk premiums on nominal securities argue for more TIPS issuance at the expense of long-term nominal issuance. Finally, Treasury benefits slightly from rising inflation because inflation impacts revenues sooner than outlays; Treasury should monetize the inflation by being a net seller of inflation.

The discussion next turned to initial auction sizes for new TIPS and the appropriate place for the new TIPS issues in the current calendar. Several members discussed the merits of offering 5-year TIPS, questioning the sources of demand for a 5-year instrument, noting that 5-year TIPS were once offered and discontinued. Treasury officials pointed out that in the past, the Committee was nearly evenly divided between new issuance of short and long-dated TIPS. Treasury officials pointed out that trading volume has picked up for shorter-dated TIPS in recent months and that central banks and term-restricted accounts were likely sources of decent demand. One member observed that central bank demand could decline as the dollar strengthened.

A few members pointed out that one reason trading volume on shorter-dated TIPS has increased is due to the nature of the cash flows on short-dated TIPS; short-dated TIPS trade much more like nominal 5-years notes, but allow investors to speculate on inflation expectations; because the cash flows on 5-year TIPS are similar to 5-year nominal they are not really a "new asset class". The trading volume is largely coming from speculators that traditionally hold nominal instruments, as opposed to typical buy-and-hold accounts that hold longer-dated TIPS. Members felt that introducing a 5-year TIPS would effectively be increasing 5-year nominal supply and 5-year nominal supply was already more than sufficient. More importantly, Treasury would not be attracting a new type of investor by offering a 5-year TIPS, where as the 20-year TIPS would attract new investors. One member pointed out that because 5-year TIPS trade like nominals, dealers would be more inclined to underwrite them because they are easier to hedge.

The Committee generally felt that the market wanted a 20-year TIPS and that the size should initially be about \$16 to \$20 billion per year, via an initial auction and a smaller reopening. The auction cycle should be such that the new instrument's cash flows are fungible with existing TIPS. The Committee's consensus was that the Treasury should wait to see if a 5-year TIPS is really needed or wanted. In the interim, seasoned 10-year TIPS could satisfy the market demand for shorter-dated TIPS. If Treasury insisted on doing a 5-year TIPS, it should be in the \$16 to \$20 billion per year range.

The Committee next addressed the question in the charge dealing with fiscal uncertainty and interest rate volatility. Mr. Bitsberger presented charts (attached) that depicted the budget uncertainty related to technical factors associated with the budget-modeling process. This was a continuation of sensitivity analysis presented in two prior meetings where Treasury presented charts showing the budget uncertainty associated with

economic forecasts and legislation. The error terms associated with technical factors were significant and further highlighted the need for flexibility and the importance of the bill market for addressing this uncertainty. Several Committee members noted that the bill market and the short-coupon market could handle greater issuance volume with little or no concession. Others suggested that if borrowing needs were substantial and surprising, that Treasury should consider issuing at various liquid points on the curve and then swap that debt in the swap market.

The Committee then focused on the appropriate level of Treasury tolerance for interest rate volatility. One member pointed out that before Treasury can attempt to optimize a portfolio, Treasury needs to state its goal and that the Committee would like more guidance in that regard. Another member raised the issue that if there is significant correlation between deficit volatility and interest-rate volatility, that Treasury should be much more concerned about rollover risk. This member pointed out that recently there has not been significant correlation between deficit volatility and interest-rate volatility, but that this current phenomena might be extreme, i. e., out in the "statistical tail" of past experience. Interest-rate volatility is extremely low right now but market consensus suggests that we are likely at the end of a secular deflationary trend and when cyclical themes begin to reassert themselves, interest-rate volatility could become more of a concern for Treasury.

Another member suggested that a multi-factor asset-liability framework might be needed to properly assess this question. It was difficult to make any assertions about interest-rate volatility absent knowledge of what is occurring to other Treasury assets and liabilities. Members agreed that more time be devoted to the study of this complex question, and that it be discussed further at future meetings.

The Committee then discussed the third question on the charge dealing with the November refunding calendar and auction schedule, which is complicated by several potential market-moving events and a holiday. Mr. Bitsberger presented three options for the refunding auction schedule in November. It was the consensus of the Committee that the third option presented was the best. That option has the 3-year note auction taking place on Monday, November 8; the 5-year note auction on Tuesday, November 9; and the 10-year note auction on Wednesday, November 10, after the FOMC meeting. The Committee felt that auctioning on three consecutive days was important and that volatility around auction time would be lower after the FOMC meeting. The Committee finalized its recommendation for borrowing in this quarter and the July-September quarter. Those charts are attached.

The meeting adjourned at 11:30 p.m.

The Committee reconvened at 3:30 p.m. to present the Treasury with observations on the degree of accuracy U.S labor market data. David Greenlaw of Morgan Stanley provided a presentation on the major indicators of the labor markets, namely the monthly household survey and payroll survey. He started off by pointing out that the two indicators differ in many respects, and that adjustments are necessary before the two numbers can be

compared. For the time period from 1994 to 2004, the two adjusted series are close in levels but differ in changes, especially month-to-month changes. He then went on to account for the sources of the differences in the two adjusted series. First, numbers from the household surveys may be biased downward, especially lately, because of measurement errors in population, most likely due to immigration. Second, numbers from the household survey decelerate (accelerate) faster than numbers from the payroll survey around cyclical turning-point. The reason is it takes time to obtain responses from start-up and close down firms. He pointed out that quarterly data such as employment insurance taxes, census of employment and wages, withheld income and payroll taxes could be used as a benchmark revision to the survey data. Overall, in conjunction with other labor indicators such as productivity growth, Greenlaw concluded that it is likely that the employment reports are a fair indicator of employment conditions.

The meeting adjourned at 4:15 p.m.

The Committee reconvened at the Hay-Adams Hotel at 5:35 p.m. The following members of the Committee were not present: Richard Axilrod, James Capra, Thomas Kalaris, Joseph Rosenberg and Thomas Marsico. The Chairman presented the Committee report to the Under Secretary for Domestic Finance, Brian Roseboro and Deputy Assistant Secretary for Federal Finance, Tim Bitsberger. A brief discussion followed the Chairman's presentation but did not raise significant questions regarding the report's content.

The meeting adjourned at 5:50 p.m.

Jeff Huther Director Office of Debt Management May 4, 2004

Certified by:

Mark B. Werner, Chairman Treasury Borrowing Advisory Committee of The Bond Market Association May 4, 2004

Treasury Borrowing Advisory Committee Quarterly Meeting Committee Charge - May 2004

Portfolio Composition

We are introducing both 5-year and 20-year TIPS. We will need to reduce nominal issuance to make room for additional TIPS issuance. In the absence of liquidity concerns, we would eliminate the reopenings of 10-year nominal securities to accommodate the new securities. We would like the Committee's views on eliminating the 10-year reopening, simply reducing the sizes of 10-year auctions, or spreading the reduction in issuance across both 5-year and 10-year issuance. In discussing these options, we would like the Committee's views on the timing of implementation of the Committee's preferred option. We would also like the Committee's view on initial auction sizes for these new TIPS offerings and the appropriate position for these securities in the issuance calendar.

Fiscal Uncertainty and Interest-Rate Volatility

As a follow up to discussions regarding the uncertainty of the budget-modeling process, we will show the Committee some charts illustrating the financing risk due to technical errors in budget forecasting. We will also show the Committee charts illustrating the trade-offs between interest costs and expected volatility. We would like the Committee's views on Treasury's tolerance for interest rate volatility.

Changes to Auction Calendar

The November refunding calendar is complicated by several potential market-moving events and Veterans Day. We would like the Committee's advice on the scheduling of auctions in the final quarter of this year.

Financing this Quarter

We would like the Committee's advice on the following:

- The composition of Treasury notes to refund approximately \$32.8 billion of privately held notes and bonds maturing or called on May 15.
- The composition of Treasury marketable financing for the remainder of the April–June quarter, including cash management bills.
- The composition of Treasury marketable financing for the July September quarter.

Other Issues

Are there other issues relating to the current state of the Treasury market that the Committee would like to bring to Treasury's attention?